

540,696

Rec'd PCT/PTO 24 JUN 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number
WO 2004/059622 A2

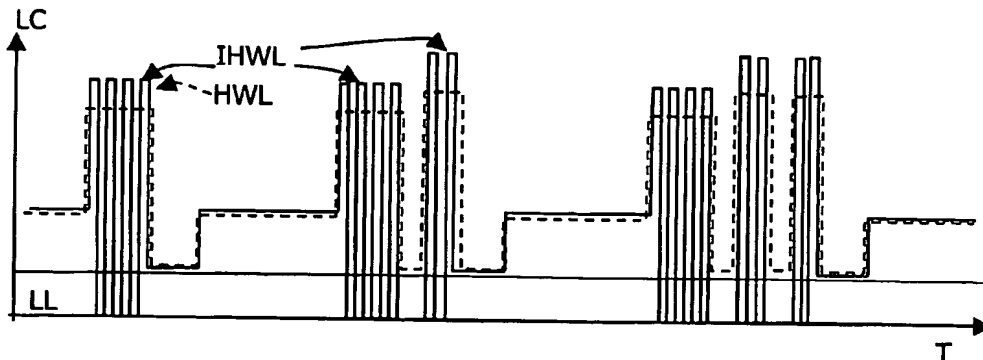
- (51) International Patent Classification⁷: **G11B 7/00**
- (21) International Application Number:
PCT/IB2003/006052
- (22) International Filing Date:
17 December 2003 (17.12.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
02293267.7 30 December 2002 (30.12.2002) EP
- (71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **DE BOER, Bart, Michiel** [NL/FR]; Société Civile SPID c/o, 156 Boulevard Haussmann, F-75008 Paris (FR). **VAN DEN HOMBERG, Johannes, Aldegonda, Theodora, Maria** [NL/FR]; Société Civile SPID c/o, 156, Boulevard Haussmann, F-75008 Paris (FR). **IMMINK, Albert, Hendrik, Jan** [NL/FR]; Société Civile SPID c/o, 156 Boulevard Haussmann, F-75008 Paris (FR). **VAN ROMPAEY, Bart** [BE/FR]; Société Civile SPID c/o, 156 Boulevard Haussmann, F-75008 Paris (FR). **TER MEULEN, Jan, Matthijs** [NL/FR]; Société Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).
- (74) Agent: **CHAFFRAIX, Jean**; Société Civile SPID, 156 Boulevard Haussmann, F-75008 Paris (FR).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG,

[Continued on next page]

(54) Title: LOW POWER DISSIPATION INFORMATION RECORDING APPARATUS.



(57) Abstract: The invention relates to an information recording apparatus intended to record information on an optical medium by forming series of recorded marks whose length between leading edge and trailing edge corresponds to a binary value by irradiation means with a beam of light. According to the invention, said irradiation means are sequentially pulsed to at least a high laser current write level from a low laser current level LL close to zero during the writing of a recorded mark. The invention enables to lower the average laser current during writing and also erasing. As a consequence the power dissipation is lowered. Application: Information recording apparatus, especially for SFFO, BluRay standards.

WO 2004/059622 A2



CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT,
LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG)

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*